

ABSTRACT

The drill (20) include a shear off safety feature. The flats (21) are connected to the bit (22) via a wasted section (23) so that upon jamming of the bit in a workpiece the wasted section will twist and shear off releasing the operator. The shank of the bit is made long enough that even if it is sheared there is still enough shank so that the but may still be used to complete a drilling procedure if this be required. The shear torque is typically 15-30 ft lbs. Preferably 15-20 ft lbs for domestic drills and 20-30 ft lbs for industrial drills.